

CLAIMS

1. An inkjet cloth printing apparatus (1) provided with a
print head (11) capable of printing on workpiece cloth (W),
5 characterized by:

a head moving mechanism (20) moving the print head (11) in
a first direction;

a cloth holder (5, 5A, 5B) holding a periphery of a printing
area of the cloth (W) on which the apparatus prints;

10 a holder moving mechanism (30) feeding the cloth holder (5,
5A, 5B) in a second direction below the print head (11), the second
direction being perpendicular to the first direction; and

a cloth passage (3) defined below a movement space through
which the cloth holder (5, 5A, 5B) is moved in the second direction
15 by the holder moving mechanism (30) so as to allow movement of
part (Wa) of the cloth (W) located outside the printing area and
running out of the cloth holder (5, 5A, 5B).

2. The cloth printing apparatus of claim 1, wherein the cloth
20 holder (5, 5A) includes a first holding member (6, 6A) and a second
holding member (7, 7A) fitted with an outer part of the first
holding member (6, 6A) and the second holding member (7, 7A)
includes a slide groove (7b) for position restriction which
extends in the second direction and an apparatus body side is
25 provided with an engaging member (1m) engaging the slide groove
(7b).

3. The cloth printing apparatus of claim 1, wherein the cloth

holder (5A, 5B) includes a first holding member (6A, 6B) and a frame-shaped second holding member (7A, 7B) which is disposed so as to overlap an upper side of the first holding member (6A, 6B), thereby holding the cloth (W) and the cloth holder (5A, 5B) is supported by a support frame (67, 76) so as to be moved by the holder moving mechanism (30), and wherein the support frame (67, 76) includes a slide groove (7b) for position restriction which extends in the second direction and an apparatus body side includes an engaging member (1m) engaging the slide groove (7b).

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4. The cloth printing apparatus of claim 3, wherein the support frame (67) is provided integrally with the second holding member (7A).

15 5. The cloth printing apparatus of claim 3, wherein the second holding member (7A, 7B) is made of a magnetic plate into a frame shape and the first holding member (6A, 6B) includes a magnet (65, 70) magnetically attracting the second holding member (7A, 7B).

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6. The cloth printing apparatus of claim 5, wherein the first holding member (6B) includes a magnet position switching unit (71) switching the magnet (70) between an attraction position where the magnet (70) attracts the second holding member 7B) and a non-attraction position where the magnet (70) is spaced away from the second holding member (7B).

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7. The cloth printing apparatus of claim 2, wherein the

holder moving mechanism (30) includes a rack (7a) which is formed on the second holding member (7, 7A) so as to extend in the second direction, a pinion (32) which is brought into mesh engagement with the rack (7a) and a drive motor (34) which rotates the pinion
5 (32).

8. The cloth printing apparatus of claim 3, wherein the holder moving mechanism (30) includes a rack (7a) which is formed on the support frame (67) so as to extend in the second direction,
10 a pinion (32) which is brought into mesh engagement with the rack (7a) and a drive motor (34) which rotates the pinion (32).

9. The cloth printing apparatus of claim 1, further comprising a passage height adjusting unit (48) for changing a
15 height of the cloth passage (3).

10. The cloth printing apparatus of claim 1, wherein the cloth holder (5, 5A, 5B) includes a cloth accommodating member (78) capable of accommodating said part (Wa) of the cloth (W)
20 in a folded state.

11. The cloth printing apparatus of claim 1, wherein the print head (11) includes a plurality of rows of nozzles which are capable of injecting ink of a plurality of colors respectively
25 and are arranged in the first direction.

12. The cloth printing apparatus of claim 1, further comprising a purging mechanism (40) purging the print head (11)

and a capping mechanism capping a head surface of the print head (11) with a cap (41).

13. The cloth printing apparatus of claim 1, further
5 comprising a first origin detection member (52) provided at the print head (11) side and a first origin position setting unit (51) provided at the apparatus body side for detecting the first origin detection member (52), thereby setting an origin position of the print head (11).

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14. The cloth printing apparatus of claim 1, further
comprising a second origin detection member (54) provided at the cloth holder (5, 5A, 5B) side and a second origin position setting unit (53) provided at the apparatus body side for detecting the
15 second origin detection member (52), thereby setting an origin position of the cloth holder (5, 5A, 5B).